Themes

- The need for releases into Langstone Harbour how when and why
- Volume and quality of wastewater released scheduled & under license – and the effects on SAC (Special Area of Conservation e.g. Langstone Harbour) and SPA (Special Protection Area e.g. the Solent) including beaches
- 3. Mitigation and Future Plans
- Havant Thicket Reservoir proposal to pump treated waste water into it / public consultation

- The need for releases into Langstone Harbour how, when and why
- Q1 What **warnings** does the Budds Farm site get that a release into Langstone Harbour may be necessary? For example, is that from weather forecasts, the met office, or do you rely on monitors on your storage tanks to show that they are about to spill over?
- Q2 How long does it take to **disperse** the released matter and from where that's the scheduled **discharges** of fully treated wastewater (like how many times in every 24 hours, how much by volume and what of what quality) plus same for **emergency releases** when tanks are likely to overflow. And do you take account of the tide for scheduled releases of treated sewage?
- Volume and quality of wastewater released scheduled & under license – and the effects on SAC and SPA including beaches
 - Data acquired by a local campaign group through the Southern Water Environmental Information Regulations (EIR) was analysed by an eminent

and renowned Professor of Mathematics. Prof Peter Hammond recently gave evidence to Parliament's Environment Audit Committee, and he also contributes to investigative journalist programming like BBC's Panorama. I understand that Southern Water is required to measure and record its sewage effluent flows every 15 minutes, but this data is *not* published on its website. Southern Water chooses instead to summarise the data over 12 or even 24 hours on its website. Such data summaries tend to mathematically camouflage non-compliant, potentially illegal discharges. Prof Hammond's analysis shows that there were 329 non-compliant discharges into the harbours surrounding Hayling Island between 2017 and 2021. Of those, 39 discharges were made from Budds Farm; these were NOT compliant to the Environment Agency's discharge permits. I understand that Southern Water were fined £90M recently for non-compliant discharges.

- Q3 If this fine was linked to the non-compliant discharges from Budds Farm into Langstone Harbour, how did Southern Water record these non-compliant discharges, and report them to the Environment Agency? Richard what is the point you're getting at in this question?
- Q4 Does Southern Water have the **capability** to calculate the **volume** of waste water released through all of its outlet pipes, and if so, can SW publish the amount of partially or un-treated waste water released into Langstone Harbour, for any given period of time please?
- Q5 If Southern Water can calculate the volume, can you also determine the quality of the waste water, at the time of release and from where the release emanates? I ask because if this sort of information is known, it would be good for residents and visitors to the area, to know on perhaps a rated scale.
- Q6 Given these non-compliant discharges can be recorded and reported to the governing body, would it be possible for Southern Water to publish 15-minute Monitoring Certification Scheme (MCERT) data on its website so the public can assess what is going on, and if not why not?

3. Mitigation and Future Plans

- Q7 I believe that Southern Water, save for the effects of biblical rainfall, completely cured stormwater discharges from Fort Cumberland with an investment of around £18M and in 18 months by building 40,000m³ of stormwater retention. Budds Farm currently has just 7,000m³ retention tanks. Investment plans tell us this will be increased to 10,500m³. At first glance, this very modest investment lacks serious ambition when Southern Water's own data demonstrated circa 60,000 minutes of discharges from Budds Farm in 2021. Can we equate minutes with volume here?
- Q8 Whilst I appreciate these calculations rely on many unpredictable parameters, I would like to know what percentage reduction in Budds Farm stormwater discharges could reasonably be expected? In other words Would this increase in size of retention tanks be enough to prevent discharges into Langstone Harbour?
- Q9 Southern Water, despite its assurances that it would revisit its Budds Farm investment plans at a recent Southern Water Regional Forum meeting, is *still* talking about nature based (i.e., low cost) solutions. Southern Water fixed the decades old serious discharge problems at Fort Cumberland with concrete. Concrete is admittedly a high carbon approach but there are no cogent arguments to support avoiding the use of concrete in this case. The reality is pollution from sewage effluent is destroying the two biggest carbon sinks in our area (i.e., the harbours themselves). Notwithstanding the above, nature-based solutions will require sufficiently clean water conditions to initially take root and of course, nature-based solutions will require decades to become effective. So....
- Q10 What will be Southern Water's approach? Will it be concrete with improved ambition to stop *all* stormwater discharges, or will it be nature-based solutions that could take a decade or to become effective? XX The bathing water profiles for

Hayling beaches say that the Eastney Long Sea Outfall (LSO) discharges are "scheduled to receive ultraviolet disinfection to protect shellfish beds in the near future, which will provide further protection to the bathing water." As you will know, **UV** disinfection is only effective on most biological agents and NOT on the c.30,000 chemicals known to be present in sewage effluent. The most well-known threat from wastewater discharges to bathing waters, is from **faecal pathogens**. The management at Budds Farm recently confirmed that Southern Water does not measure levels of faecal pathogens coming into the plant OR the levels of faecal pathogens in treated effluent sent to outfalls. So.....

- Q11 If Southern Water is not monitoring the efficacy of removing faecal pathogens from wastewater how does that properly inform **UV investment decisions** if the levels of pollutants are unknown? ...and
- Q12 Notwithstanding that, what is the current status of any **UV** onsite / remote investment plans for Budds farm discharges to all outfalls?
- Q13 Discharges from Southern Water's Long Sea Outfall (LSO) from Eastney is claimed *not to affect any bathing waters*. It discharges 109 million litres of wastewater and stormwater <u>every day</u>; where / how far out to sea is that?
 - Southern Water hydrodynamic data obtained via Environmental Information Regulations (EIR) clearly shows that the LSO pollutes several bathing waters in the eastern Solent including all three of Hayling Island's beaches [see https://www.youtube.com/watch?v=fwYliaiqETw] claiming excellent water classification (note: classification is 100% not the same thing as actual water quality). The bathing water profiles for Hayling beaches say that "This discharge is scheduled to receive ultraviolet disinfection to protect shellfish beds in the near future, which will provide further protection to the bathing water."
- Q14 When will UV treatment be installed to disinfect all LSO discharges from Budds Farm?

Q15 – Southern Water has pledged to supply and install a Real Time Water Quality Monitoring system, sited about 40m off the beach at Hayling Island, near to the In on the Beach, at its own expense of some £50k and we thank you for that. Would you consider monitoring the water in Langstone Harbour by another of these monitoring devices, because as well as bathing water in the bathing season, we are all concerned about the Special Area of Conservation that is Langstone Harbour and further out, The Solent a Special Area for Protection?

Trying to restrict rainwater getting into the sewer network using smart water butts and other creative "attenuation" schemes is clearly something that Havant Borough Council can help with for new development.

- Q16 What measures could your customers our residents take to help with the management of wastewater? For example, avoiding putting anything but the 3 Ps down toilets, installing water butts, not paving over ever inch of gardens, or by laying only permeable coverings for vehicle parking etc etc?
- Q17 What communications do you send to customers and in what formats to get your messages across, about the management of our waste water?
- Q18 I understand that Budds Farm processes wastewater for Portsmouth,
 Havant, Hayling Island, Cosham, Paulsgrove, Waterlooville, Horndean and
 Hambledon. Given the increase in populations over the past 5 years (2% to
 now 213,000 people in Portsmouth City Council area and 1.8% to 127,000 people in Havant
 borough area) what increase in volume of wastewater has Southern Water had
 to process, and what are the projections for the next 10 years and beyond?
 Critically, is Budds Farm fit for the future?

Havant Thicket Reservoir – proposal to pump treated waste water into it / public consultation

Q19 – Is Budds Farm **investment** in this regard being **restricted by real estate** limitations, or for more profitable **water recycling installations** due in the near future, such as the Havant Thicket Reservoir perhaps?

END